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10/811,565	03/29/2004	Salvador Marquez	ECV-5783	1380

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EDWARDS LIFESCIENCES CORPORATION  
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EXAMINER
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PRONE, CHRISTOPHER D

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3738

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/811,565  
Filing Date: March 29, 2004  
Appellant(s): MARQUEZ, SALVADOR

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Guy Cumberbatch  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/12/09 appealing from the Office action mailed 10/12/07.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

Whether claims 1-18 are not patentable under 35 U.S.C §103(a), as being obvious over U.S. Patent No. 6,736,845 to Marquez, et al. in combination with WO 00/53356 to Klockner et al.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,736,845 B2	Marquez et al.	5-2004
WO 00/53356	Klockner et al	9-2000
3,439,917 A	Gentile	4-1965
2,247,499 A	Hutchison Jr.	11-1939

Reference WO 00/53356 was mistakenly referred to as Habersack in the final office action, but in view of the correct reference number and the applicant's arguments it is clear the applicant understood which reference the examiner was referring to. From this point on this application will now be referred to as Klockner.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103 as being unpatentable over USPN

6,736,845 B2 Marquez et al in view of WO 00/53356 Klockner et al.

Marquez discloses the invention substantially as claimed being heart valve implant comprising a support frame for a flexible leaflet prosthetic heart valve made of nitinol comprising a plurality of cusps 74, a plurality of enlarged ear shaped commissures 80 further comprising a fragile bridge 90, and a fabric covering. However, Marquez does not disclose that the frame and bridges be a continuous homogeneous material.

Klockner discloses a continuous homogeneous metal sheet make with dedicated thinner weak portions as break points in the same field of endeavor for the purpose of ease of production.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teaching of continuous homogeneous breakable connections as taught by Klockner with the implant of Marquez in order to simplify production and reduce costs.

#### **(10) Response to Argument**

The applicant starts by arguing that Marquez does not disclose the support frame having a continuous stiffness along the cusps and commissures and designed to fracture upon relative movement of the cusps after implantation. The applicant supports

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this argument by pointing out multiple components of Marquez and arguing about their differences from the claims. However the combination of Marquez and Klockner clearly over comes these differences through the teachings of Klockner. By utilizing the homogeneous frame comprising breaking points taught by Klockner the frame of Marquez would have a continuous stiffness that will fracture upon movement after implantation. The applicant even argues that Marquez only wants the connections between the cusps to be flexible and that designing them to fracture are counter the intent of Marquez's invention. The examiner strongly disagrees because Marques clearly discloses embodiments where his connections break apart, which was cited on lines 1-5 of page 5 of the applicant's appeal brief. The claims only require a continuous stiffness which the combination discloses through its materials and configurations not a specific degree of stiffness. Even with the modification of Marquez the implant would maintain its flexibility through the properties of the materials used and through the breaking of the connection taught by Klockner.

The applicant then argues that Klockner is in the same field of endeavor as heart valve fabrication.

However, the examiner never claimed that Klockner was in the field of heart valve fabrication. The claims are not even directed at heart valve fabrication because they are only directed at the final product. Klockner is in the field of metal fabrication which would comprise bridging three curved metal portions as done in the current application. Furthermore, Marquez states that the connections can be made by other suitable attachment means which opens up the field of endeavor to the fabrication and

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connection of metal components. In the field of metal fabrication or any other connection art, the theory of having a weakened bridge that will fracture after use is very old and well known. Klockner is a clear example of this type of connection along with USPN 3,439,917 and USPN 2,247,499. This type of substitution is clearly a substitution of equivalent connection parts.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Christopher D Prone/

Examiner, Art Unit 3738

Conferees:

/Corrine M McDermott/

Supervisory Patent Examiner, Art Unit 3738

/Thomas C. Barrett/

Supervisory Patent Examiner, Art Unit 3775

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